EH-411-097/0002 (April 1997)



MILITARY MUNITIONS RULE

BACKGROUND:

On February 12, 1997, the Environmental Protection Agency (EPA) issued the final version of Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties (62 FR 6622). The rule identifies when conventional and chemical military munitions become a hazardous waste under the Resource Conservation and Recovery Act (RCRA), and provides for the safe storage and transport of these wastes. The rule also amends existing regulations regarding emergency responses involving both military and non-military munitions and explosives. In addition, the rule exempts all generators who have contiguous properties divided by public right-of-ways from the RCRA manifest and transporter Hazardous Waste Identification requirements when transporting hazardous waste between or along the border of their contiguous properties. The rule does not finalize provisions regarding the solid waste status of military munitions on closed and transferred ranges. EPA has decided to postpone action for further analysis of comments received on the proposed Military Munitions Rule and an analysis of the Department of Defense (DOD) Range Rule. The DOD Range Rule will govern the cleanup of munitions on closed, transferring, and transferred ranges.

Issuance of the *Military Munitions Rule* was mandated by Congress in 1992 with passage of the Federal Facility Compliance Act (FFCA) of 1992. Section 107 of the FFCA amended RCRA by adding Section 3004(y), which requires the EPA, in consultation with DOD and appropriate State officials, to develop regulations identifying when conventional and chemical military munitions become hazardous waste subject to RCRA, and providing for their safe transportation and storage. Beginning in November 1992, EPA consulted with the DOD, the military services, the States, and various environmental interest groups on this regulatory initiative and issued a proposed rule in November 1995 (60 FR 56468). Because the Department of Energy (DOE) manages the nation's nuclear arsenal, maintains security forces to protect it, and conducts development and testing of conventional weapons for DOD, it has been an active participant in developing the rule.

STATUTES:

Sections: 2002, 3001-3007(including 3004(y)), 3010, 7003, and 7004 of the Solid Waste Disposal Act of 1965, as amended, including amendments by RCRA and Section 107 of the FFCA (42 U.S.C. 6912, 6921-7, 6930, and 6973-4).

REGULATIONS:

40 CFR Parts 260, 261, 262, 263, 264, 265, 266, and 270.

REFERENCES:

- Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties (February 12, 1997, 62 FR 6622)
- 2. DOE Explosives Safety Manual (DOE M 440.1-1 [Formerly DOE/EV/06914]-REV. 8., March 29. 1996])
- 3. Military Munitions Rule Issues Papers (August 16, 1994)
- 4. Consolidated DOE Response to the Military Munitions Proposed Rule (August 1, 1996)
- 5. The Alternatives Presented in the EPA Issue Papers on the Munitions Rule (DOD Comments, December 12, 1994)
- 6. FFCA Munitions Provision (DDESB-KO, June 5, 1995)
- 7. Draft DOD Range Rule (DOD, February 10, 1997)

What are military munitions and why are they of concern to DOE?

The term "military munitions" is defined in the preamble to the rule "to include all types of both conventional and chemical ammunition products and their components, produced by or for the military for national defense and security (including munitions produced by other parties under contract to or acting as an agent for DOD—in the case of Government Owned/Contractor Operated [GOCO] operations and subcontractors)." Examples of components include propellants, explosives, bulk chemical warfare, and warheads. Product examples include

rockets, bombs, small arms ammunition, and chemical munitions.

The definition excludes nuclear weapons, nuclear devices, and non-nuclear components managed under the DOE nuclear weapons program, which still must have necessary "sanitization" operations completed under the Atomic Energy Act (AEA) of 1954. However, upon completion of "sanitization" of the non-nuclear components (or component subparts) of nuclear weapons and devices, the remaining materials (i.e., sanitized materials) are considered "military munitions." Also, non-nuclear components not requiring "sanitization" are considered "military munitions." This exclusion is made because the FFCA does not contemplate including nuclear weapons within the scope of the rule pursuant to Section 107. Furthermore, EPA recognizes that DOE's practices and procedures for managing nuclear weapons under the AEA, as well as the potential impacts on DOE operations, are significantly different from those of DOD pertaining to conventional and chemical munitions.

Other related definitions include the following:

"Sanitization" - the irreversible modification or destruction of any parts of nuclear weapons, devices, trainers, or test assemblies as necessary to prevent revealing classified or otherwise controlled information.

"Military" - for purposes of the rule, "military" is meant to include DOE as well as the DOD, the Armed Services, Coast Guard, National Guard or other parties under contract to or acting as an agent for these organizations, as long as they manage "military munitions." (§ 266.201)

"Military ranges" - designated land and water areas set aside to conduct military munitions research and development testing or to train military personnel in weapons use and handling.

Military munitions constitute a major part of operations within the DOE complex at several sites representing both the Defense Programs and Environmental Management Program. At the Pantex Plant, weapons are assembled and disassembled for stockpile management and final disposition according to Presidential directives under the AEA. Weapons development and testing are conducted at Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL), and Sandia National Laboratories (SNL). These laboratories also act as stockpile stewards for the

DOD. The *Military Munitions Rule* affects the work in each of these areas. In addition, site security throughout the DOE complex uses military munitions.

What are the major provisions of the Military Munitions Rule that may affect DOE?

In the *Military Munitions Rule*, EPA has consolidated all requirements that are solely applicable to military munitions in 40 CFR Part 266, subpart M. They have included appropriate cross references to other RCRA requirements that are applicable, but not unique. Unless specified in this subpart, the applicability of requirements in 40 CFR Parts 260 through 270 to military munitions is not changed.

1) Determining When Military Munitions Become Solid Wastes

In meeting the requirement of the FFCA (RCRA Section 3004[y]) to identify when military munitions have become "hazardous wastes," EPA focuses on determining when they become a "solid waste." Under RCRA regulations, if a material is not a "solid waste" (as defined in 40 CFR § 261.2), it cannot be a "hazardous waste." "Hazardous wastes" are solid wastes that meet the criteria in 40 CFR § 261.3.

The rule finalizes conditions under which munitions become a solid waste. It also clarifies conditions under which management of military munitions (used and unused) constitutes intended use and therefore is not subject to RCRA regulation.

When military munitions become a solid waste

Unused military munitions become a solid waste when 1) abandoned by being disposed of, burned, or incinerated or treated before disposal; 2) removed from storage for disposal or treatment prior to disposal; 3) deteriorated beyond usage; or 4) determined by an authorized military official to be a solid waste.

Thus, open burning/open detonation or incineration of unused munitions (except during training or emergency response) is regulated under RCRA Subtitle C standards. This includes permit requirements in 40 CFR Part 270 (assuming the waste munitions meet the § 261.3 definitions of "hazardous waste"). Munitions being used for their intended purpose during training, testing, and development, or emergency response are not subject to this

requirement.

Used military munitions become a solid waste when they are managed off-range, (i.e., when transported off-range and stored, reclaimed, treated, or disposed of), or disposed of on-range (i.e., buried or landfilled).

Munitions that land off-range and are not promptly rendered safe (if necessary) and retrieved are considered abandoned and become a solid waste.

When military munitions are not a solid waste

· Intended use

Under RCRA, using products for their intended purpose, even when it results in their being deposited on the land, does not necessarily constitute "discard." It is not waste management and is not subject to regulation.

Munitions used in military training exercises for military personnel and explosive ordnance disposal personnel are not regulated under RCRA. This type of "intended use" includes DOE security force training.

Munitions used in weapons research, development, testing, and evaluation programs, such as those conducted at LLNL, LANL, or SNL, are not regulated. In addition, removal of a used or fired munition from a testing or training firing range for further testing and evaluation is considered to be within the definition of use of a material for its intended purpose and is not regulated under RCRA Subtitle C. Any debris or unexploded ordnance (UXO) shipped off-range for further evaluation is not a solid waste (unless the evaluation is related to treatment and disposal).

Determination of whether a range is active or inactive, or is closed is key to determining if the range clearance operations are part of range maintenance or are subject to RCRA Subtitle C. The recovery, collection, and on-range treatment or destruction of UXO at active or inactive ranges are considered an intrinsic part of training or testing, and therefore are excluded from regulation under RCRA Subtitle C. The collection of fired bullets, including those that contain lead, at indoor firing ranges is also considered range maintenance.

The requirements of debris and UXO on active or inactive ranges can be summarized as follows: on-range collection and treatment or destruction of

UXO are not regulated. On-range disposal (collection and landfilling) of UXO and contamination is regulated. Any debris or UXO shipped off-range for treatment is a solid waste and, if hazardous, is potentially regulated under RCRA Subtitle C.

EPA did not finalize the proposed requirement that used or fired munitions that are recovered and then treated on-range at a closed or transferred range (unless the transferred range is still in active use as a range) would be a solid waste potentially subject to RCRA Subtitle C regulations. DOD is developing a rule for Closed, Transferred, and Transferring Ranges Containing Military Munitions that may be used for DOE UXO clearances. Until the Range Rule is finalized and EPA completes analysis of relevant Military Munitions Rule comments and the adequacy of the protection offered by the Range Rule, the current regulatory framework will remain in effect. Clearing closed ranges will be subject to regulatory control. Use of EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulations will avoid many of the administrative burdens that would be encountered under RCRA.

· Disassembly Operations

The rule states that "unused military munitions that are being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subject to materials recovery activities are not solid waste." Only when processing of these materials involves use constituting disposal (§ 261.2[c][1]) or burning for energy recovery (§ 261.2[c][2]) or if they have already been classified as wastes are they subject to RCRA Subtitle C.

2) Emergency Response Standards

The rule clarifies that persons responding to explosives and munitions emergencies are not subject to RCRA generator, transporter, or permit requirements (§ 262.10[i] and § 263.10[e]). After the emergency has passed, however, any additional waste management activities may be subject to RCRA.

3) Storage Standards

For military munitions that are hazardous waste, EPA has added subpart EE, *Hazardous Waste Munitions and Explosives Storage* to 40 CFR Parts 264/265 (treatment, storage, and disposal facility [TSDF] standards and interim status standards, respectively). Subpart EE lays out requirements for the storage of both chemical and nonchemical

waste munitions. Storage of waste nonchemical munitions is subject to subpart EE and other requirements found in 40 CFR Parts 260-279 unless it meets the conditions of the exemption at § 266.205(a) (essentially requiring that they be subject to the Department of Defense Explosives Safety Board [DDESB] management standards). While portions of the DDESB management standards have been incorporated by reference into the DOE Explosives Safety Manual, DOE does not qualify for the exemption. However, subpart EE was built around the DDESB standards with the additional standards (e.g., secondary containment and closure plans) being incorporated where required for completeness. As a result, subpart EE should not require major changes in the Explosives Safety Manual. Obtaining new TSDF storage permits for military munitions waste at DOE sites is anticipated to be less cumbersome under subpart EE requirements than under existing regulations.

Newly regulated waste military munitions will require generators to respond based on their permit status. Generators who do not have permits will need to ensure that they can remove waste military munitions from their sites within 90 days. Generators who have interim status permits will be required to file a modified Part A, and those with permits will be required to submit either a Class 1 or Class 2 permit modification.

4) Transport Standards

Because of universally applicable changes made by the new rule, manifests are no longer required for DOE shipments of hazardous waste (including transport of hazardous waste military munitions) on right-of-ways on or between contiguous properties or along the perimeter of contiguous properties owned by the same person. This change is found in § 262.20(f) and serves also to exempt shipments from DOT "hazardous waste" shipping regulations (49 CFR Parts 171-180), which depend on their being subject to EPA Uniform Hazardous Waste Manifest Requirements. However, these materials are still potentially subject to other DOT shipping requirements if they are classed as hazardous materials for some other reason. In addition, under § 263.10(a), these shipments are no longer required to use a transporter with a hazardous waste identification number. However, transporter requirements found at § 263.30 and § 263.31 concerning responding to discharges of hazardous waste on a public right-of-way will continue to apply in the event of a spill. In taking advantage of the manifest exemption, DOE will need to consider

how the emergency coordinators are to be kept informed of waste movements under the new regime involving shipments along public roads and along the perimeters of properties without manifests and how to minimize exposure to local areas surrounding the property.

5) State Authority

The Military Munitions Rule promulgates several requirements that are less stringent than those currently in effect through state programs (e.g., exemption from manifest requirements during transportation between contiguous properties). Even though states are required only to maintain regulations that are at least as stringent as federal regulations (40 CFR 271.21), EPA "strongly urges" them to adopt the relaxed requirements to ensure clear, consistent guidelines for handlers of military munitions. As a result, the less stringent aspects of the Military Munitions Rule may or may not be adopted by all states.

How do I find out more about the Military Munitions Rule?

DOE staff may obtain additional information on the *Military Munitions Rule* in several ways:

DOE Staff Contacts:

Denise Freeman Office of Environmental Policy and Assistance (EH-411) Phone: (202) 586-7879; FAX: 586-0955 By Internet: denise.freeman@eh.doe.gov

EPA Contacts:

Phone:

- RCRA Hotline (9:00-6:00 EST) (800)424-9346 or (703)412-9810 from Government or Washington, DC local calling area.
- (For more detailed information on specific aspects of the *Military Munitions Rule*)
 Ken Shuster, EPA (703) 308-8759

Write:

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